

III. REMARKS

Pursuant to current guidelines, a complete listing all claims presented in the application is provided above, with current claim status, and the text of all claims currently pending in the application. Currently amended claims include revision markings to show changes from the immediately prior version thereof.

Claim Rejections under 35 USC § 102

Claims 24-28, 32-41 and 45 were rejected in the Office Action under 35 U.S.C. § 102(b) as being anticipated by Omann (US 5,451,003).

Claim Rejections under 35 USC § 103

Claims 24 and 35 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Mendenhall (US 4,095,284) in view of Omann.

Claims 30 and 31 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Omann in view of Brock (US 5,451,003), Suzuki (JP 55142502 A) and what known art.

Claims 24-28, 32-41 and 45-47 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Omann in view of Minge et al. (US 2,368,371)

Allowable Subject Matter

Claim 29 was objected to as dependent upon a rejected base claim, but was indicated as allowable if rewritten with the limitation of the base claim and intervening claims.

Amendment to the Claims

Applicant thanks the Examiner for identifying claim 29 as allowable. In response thereto, all of the limitations of claim 29 have been incorporated into previous claim 24, from which claim 29 depended without any intervening claims, and presented as new claim 48. Accordingly, it is believed that claim 48, and claims 49-54 depending therefrom, are in condition for allowance.

Claims 10-23 and 42-44 have been canceled pursuant to requirement specified in the Office Action on page 7 under the heading "Election/Restrictions" for cancellation or other appropriate action. Cancellation of these claims is made without prejudice, and not in response to a rejection thereof or in order to place any claims in condition for allowance. The requirement for cancellation or other appropriate action is respectfully traversed, because the cited authority is not applicable for these nonelected claims. MPEP 821.01 concerns cancellation of claims after an election has been made FINAL, following election with traverse. Neither of these elements is applicable in the present case. The election requirement was not traversed, and the election requirement was not made FINAL. 37 CFR 1.144 concerns petitioning the Director after a final requirement for restriction, the filing of which may be delayed until after a final action on or allowance of the claims to the elected invention, but no later than an appeal, and which petition will not be considered unless request for reconsideration of the election requirement was not made. Thus, 37 CFR 1.144 also includes no provision that "A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action."

Claims 28, 35-41 and 46-47 are also canceled without prejudice, and not in response to a rejection thereof or in order to place any claims in condition for allowance. Rejection of such claims is traversed as discussed below and in the response to the previous office action, and applicant reserves the right to re-present these claims.

Claim 24 has been amended for clarification purposes in relation to the prior art cited in the Office Action in rejection thereof.

Remarks Concerning Rejection of Claims

Omann Does Not Anticipate Claim 24

Applicant incorporates herein all remarks concerning Omann and claim 24 in response to the previous office action. In addition, and to some extent, recapitulating:

The assertions and conclusions of the following excerpt from page 2 of the office action are traversed: "Applicant teaches that an asphalt-aggregate ratio can be established by setting a shredder size or a screen opening size (spec., para. 44-47), thus Omann can be interpreted as establishing and controlling an asphalt-aggregate ratio when teaching a shredder or a screen set to a specific size." In contrast to this excerpt, and its citation as support for rejection of claim 24, the cited paragraphs of the specification support the proposition that the asphalt-aggregate ratio

of the fine material can be adjusted or controlled by setting a shredder size or a screen opening size, but as discussed in greater detail in the response to the previous office action, the cited paragraphs and the remainder of the specification do not support the proposition that the target aggregate asphalt-aggregate ratio can be established by setting a shredder size or a screen opening size. Nor can Omann be interpreted as establishing a target asphalt-aggregate and controlling the asphalt-aggregate ratio in the fine material "when teaching a shredder or a screen set to a specific size." In making this assertion in the office action, no distinction is made between the target asphalt-aggregate ratio and the asphalt-aggregate ratio in the fine material. The basis for this assertion in the office action appears to be that, specifying a shredder or a screen set to a specific size during design or specification of the device results in an implicit target asphalt-aggregate ratio that is presumably the same as the actual asphalt-aggregate ratio as achieved in the fine material. However, this implication holds, at most, for a known and constant asphalt-aggregate ratio in the shingle material supplied to the shredder. In other words, for a shredder or a screen set to a specific size during design or specification of the device, the asphalt-aggregate ratio in the fine material will vary as the asphalt-aggregate ratio in the shingle material supplied to the shredder varies. Specifying a shredder or a screen set to a specific size during design or specification of the device will, obviously, result in some asphalt-aggregate ratio in the fine material; it will not, however, control the asphalt-aggregate ratio in the fine material since such ratio will vary with the asphalt-aggregate ratio in the shingle material; and it will not result in establishing a target asphalt-aggregate ratio as taught in the application. Thus, as stated in the response to the previous office action, establishing a target asphalt-aggregate ratio in fine material is simply not a consideration in Omann, let alone taught, suggested or implied to support a rejection based on anticipation of the rejected claims. To clarify this point, claim 24 has been amended to specify that the target asphalt-aggregate ratio is established independently of the controlling of the asphalt-aggregate ratio in the fine material. This is clearly not anticipated by Omann teaching a shredder or a screen set to a specific size.

The assertions and conclusions of the following excerpt from pages 2-3 of the office action are also traversed: "Further, Omann teaches processing the waste shingles for use in roadways (Abstract), thus the roadways material requirements can be regarded as establishing the 'target asphalt-aggregate ratio.'" In contrast to this excerpt, and its citation as support for rejection of claim 24, Omann, in fact, teaches pulverizing all of the supplied shingle material to a granular

level. In this regard, no target asphalt-aggregate ratio is established by Omann, either explicitly, or implicitly by its intended use. Whatever asphalt-aggregate ratio is supplied to the device is the asphalt-aggregate ratio that will result from the device, except to the extent that additional granular material 128 is introduced because "It has been found that there is adequate oil content within the shingles 10 as to permit the addition of these recyclable materials for use in patch or roadway." (Omann, col. 6, lines 48-56.) Thus, Omann does not establish a target asphalt-aggregate ratio as specified in claim 24.

Therefore, it is respectfully submitted that Omann does not anticipate claim 24 as amended, or the claims depending from claim 24.

Omann Does Not Anticipate Claim 25

Applicant incorporates herein all remarks concerning Omann and claim 24 in the response to the previous office action, and as presented above. In addition:

The assertions and conclusions of the following excerpt from page 3 of the office action are traversed: "Omann teaches checking the ratio (i.e., gradation testing) of the material being processed and then adjusting the fine ratio (i.e., choosing appropriate screen size) (col. 6, ln. 3543)." In contrast to this excerpt, and its citation as support for rejection of claim 25, the gradation test of Omann is a test related to sizing of the granular material, or more specifically, the "% of Shingle Granular Material 136 Passing" through particular sized "Sieve gradation." This gradation test reveals nothing of the target asphalt-aggregate ratio, or the asphalt-aggregate ratio of the granular material. Thus, checking the asphalt-aggregate ratio in the fine material and adjusting the ratio of fine material to coarse material towards obtaining the target asphalt-aggregate ratio in the fine material, as presented in claim 25, is not anticipated, implicitly or explicitly, alone, or in combination with any other prior art of record.

Omann Does Not Anticipate Claim 26

Applicant incorporates herein all remarks concerning Omann and claims 24-25 in the response to the previous office action, and as presented above. In addition:

The assertion and conclusion of the following excerpt from page 3 of the office action are traversed: "Further, the shredding devices (38, 136) can be regarded as separation stations, wherein the addition of material, such as aggregate, with an optional third conveyor (col. 8, ln. 48-56) ... can be regarded as adjusting said separation rate." In contrast to this excerpt, and its citation as support for rejection of claim 26, Omann does not support the proposition that the optional third conveyor adjusts the separation rate of the fine material from the course material

towards obtaining the target asphalt-aggregate ratio in the fine material as specified in claim 26, and no support is provided in the office action for such assertion.

Omann Does Not Anticipate Claim 27

Applicant incorporates herein all remarks concerning Omann and claims 24-26 in the response to the previous office action, and as presented above. In addition:

The assertion and conclusion of the following excerpt from page 3 of the office action are traversed: "Further, the shredding devices (38, 136) can be regarded as separation stations, wherein the addition of material, such as aggregate, with .. the changing of the screen aperture size can be regarded as adjusting said separation rate." In contrast to this excerpt, and its citation as support for rejection of claim 27, Omann does not support the proposition that adjusting the screen aperture size adjusts the separation rate of the fine material from the course material towards obtaining the target asphalt-aggregate ratio in the fine material as specified in claim 26, and no support is provided in the office action for such assertion.

Omann Does Not Anticipate Claims 32-34

Applicant incorporates herein all remarks concerning Omann and claim 24 in the response to all previous office action, and as presented above, and responses concerning rejection of claims 32-34 in earlier office actions. In addition, and to some extent recapitulating:

As discussed fully in the specification, fine material with a maximum size of between one-half (1/2) inch to one and one-half (1 ½) inches (claim 32), shredded material of a first maximum size of between approximately one (1) inch to four (4) inches (claim 33-34), and shredded material of a first maximum size of between approximately two (2) inches to three (3) inches (claim 34), result in the new and unexpected ability to obtain from shredded asphalt shingle material the designated fine and course materials suitable for producing different finished products. Nothing in Omann or the other prior art of record would suggest or motivate an artisan to formulate a process of experimentation to obtain the recited ratios and sizes in an effort to optimize or find workable ranges for such ratios and sizes, because neither Omann nor the other prior art of record demonstrates or suggests the desirability for such an endeavor for the purpose achieved in the current invention.

Omann Does Not Anticipate Claim 45

Applicant incorporates herein all remarks concerning Omann and claim 24 in the response to the previous office action, and as presented above. In addition:

The assertions and conclusions of the following excerpt from pages 2-3 of the office action are traversed: "Further, Omann teaches processing the waste shingles for use in roadways (Abstract), thus the roadways material requirements can be regarded as establishing the 'target asphalt-aggregate ratio' and this ratio can be regarded as established 'independently' of the shingle ratio." In contrast to this excerpt, and its citation as support for rejection of claim 45, Omann, in fact, teaches pulverizing all of the supplied shingle material to a granular level. In this regard, no target asphalt-aggregate ratio is established by Omann, either explicitly or implicitly, or independently of the asphalt-aggregate ratio in the shingle material. Whatever asphalt-aggregate ratio is supplied to the device is the asphalt-aggregate ratio that will result from the device, except to the extent that additional granular material 128 is introduced because "It has been found that there is adequate oil content within the shingles 10 as to permit the addition of these recyclable materials for use in patch or roadway." (Omann, col. 6, lines 48-56.) Thus, Omann does not establish a target asphalt-aggregate ratio independently of the asphalt-aggregate ratio in the shingle material to which the controlling step controls the asphalt-aggregate ratio in the fine material as specified in claim 45.

Mendenhall in view of Omann Does Not Render Obvious Claim 24

Applicant incorporates herein all remarks concerning Mendenhall in view of Omann and claim 24 in the response to the previous office action, and concerning Omann and claim 24 as presented above. In addition, and to some extent, recapitulating:

The assertions and conclusions of the following excerpt from page 3 of the office action are traversed: "Mendenhall teaches that it is known to crush and then separate asphalt-aggregate compositions into various size ranges, thus it is implicit from the use of a crusher and the selection of a size range that an asphalt-aggregate ratio has been established and then controlled." However, as with the rejection of claim 24 based on Omann, in making this assertion in relation to Mendenhall, the office action, makes no distinction between the target asphalt-aggregate ratio and the asphalt-aggregate ratio in the fine material. The basis for the assertion in the office action appears to be that, use of a crusher and the selection of a size range during design or specification of the device results in an implicit target asphalt-aggregate ratio that is presumably the same as the actual asphalt-aggregate ratio as achieved in the fine material. However, this implication holds, at most, for a known and constant asphalt-aggregate ratio in the shingle material supplied to the device. In other words, for a device set for a specific range during design or specification of the device, the asphalt-aggregate ratio in the fine material will vary as the asphalt-aggregate

ratio in the raw material supplied to the device varies. Specifying a device set to a specific size during design or specification will, obviously, result in some asphalt-aggregate ratio in the fine material; it will not, however, control the asphalt-aggregate ratio in the fine material since such ratio will vary with the asphalt-aggregate ratio in the raw material; and it will not result in establishing a target asphalt-aggregate ratio as taught in the application. Thus, establishing a target asphalt-aggregate ratio in fine material is simply not a consideration in Mendenhall, let alone taught, suggested or implied to support a rejection based on anticipation of the rejected claim. To clarify this point, claim 24 has been amended to specify that the target asphalt-aggregate ratio is established independently of the controlling of the asphalt-aggregate ratio in the fine material. This is clearly not anticipated by Mendenhall teaching a crusher and the selection of a size range, alone, or in combination with Omann.

Omann in view of Brock and Suzuki Does Not Render Obvious Claims 30 and 31

Applicant incorporates herein all remarks concerning rejection of claims 30-31 in the response to the previous office actions, and concerning Omann and claim 24 as presented above. In addition, and to some extent, recapitulating:

Omann does not teach or suggest the elements of claim 24 from which claims 30 and 31 depend. Therefore Omann cannot render claims 30 and 31 obvious in view of Brock and Suzuki for the reasons cited in the Office Action. Further, Applicant respectfully traverses the interpretation of Brock and Suzuki as presented in the Office Action in relation to “ratios by weight and volume,” and Applicant disagrees that a reasonable interpretation of Brock and Suzuki would contribute to rendering obvious claims 30 and 31. Claim 30 provides for fine material with an asphalt-aggregate ratio of between approximately 30% to 70% by volume, and claim 31 provides for fine material with an asphalt-aggregate ratio of approximately 50-50 by weight. As discussed fully in the specification, such ratios result in the new and unexpected ability to obtain from shredded asphalt shingle material the designated fine and course materials suitable for producing different finished products. Nothing in Omann, Brock or Suzuki would suggest or motivate an artisan to formulate a process of experimentation to obtain the recited ratios in an effort to optimize or find workable ranges for such ratios, because such prior art does not demonstrates or suggests the desirability for such an endeavor for the purpose achieved in the current invention..

Applicant respectfully traverses the assertion in the office action that this aspect can be regarded as admitted prior art. Support for traversing this finding by the examiner is provided in the responses to the prior office actions.

Omann in view of Minge Does Not Render Obvious Claims 24-27, 32-34 and 45

Applicant incorporates herein all remarks concerning rejection of claims 24-27, 32-34 and 45 in the response to the previous office actions, and as presented above. In addition, Applicant traverses the asserted combination of Omann and Minge as presented in the office action. These two disclosures relate to different processes, there is no proper motivation for combining these references as cited in the office action, and if properly combined, would not result in the invention of the claimed invention. Omann is specifically concerned with successively reducing the supplied shingle material to a granular level, and combination of the separating as disclosed in Minge would result in alternate processing to achieve the granular product. For all of these reasons, it is respectfully submitted that Omann in view of Minge does not render obvious claim 24-27, 32-34 and 45.

Remarks Concerning Response to Arguments

Applicant maintains his position concerning interpretation of separating of fine and coarse materials in regards to Omann, and for the reasons stated above, traverses application of Minge in combination with Omann.

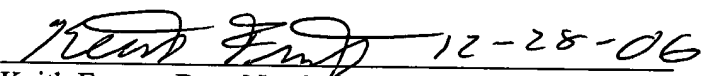
For the reasons discussed above, Applicant traverses the position in the office action as presented concerning "establishing" and "controlling" the "target ratio." The examiner is treating "establishing" and "controlling" with no distinction between the target asphalt-aggregate ratio and the asphalt-aggregate ratio in the fine material. To the extent that specification of, for example, a screen size, results in specification of a target asphalt-aggregate ratio and a resulting asphalt-aggregate ratio in the fine material, then such is only reasonably achievable for a fixed asphalt-aggregate ratio in the supplied shingle material. Thus, for the reasons discussed above, Applicant traverses the assertion in the office action that the specification teaches screen size and rate of flow establishes or controls the target ratio, and no credible support has been provided for such assertion. The specification teaches that screen size and rate of flow can be used to control the asphalt-aggregate ratio in the fine material. Applicant further traverses the assertion in the

office action that the prior art discloses screen size is a major factor in determining the target asphalt-aggregate ratio, and no support has been provided for such assertion.

Summary

In summary, Omann, Mendenhall and the other prior art of record do not teach, suggest, or provide motivation for separating shredded asphalt roofing material into course material, and fine material having an asphalt-aggregate composition comprising both asphalt pieces and aggregate, establishing a target asphalt-aggregate ratio and taking steps to obtain such a ratio as presented in the various claims with the additional elements recited therein. Nor does the prior art suggest the desirability of determining optimum or workable ranges for such ratios and sizes as specified in certain of the claims. Accordingly, Applicant believes the claims as currently presented patentably distinguish over the prior art of record, and are in a condition for allowance, and such action is respectfully requested.

Respectfully submitted,

 12-28-06

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Serial No. 09/838,045
Filing Date: 04/18/2001